

Use of 2-hydroxy-2-sulfinatoacetic acid or salts thereof as initiator in W/O emulsions

Abstract

Process for the preparation of homopolymers or copolymers by homopolymerization or copolymerization of free-radically polymerizable water-soluble and/or water-dispersible monomers, optionally with further comonomers and optionally with at least one crosslinker, in an inverse emulsion polymerization in the presence of at least one redox initiator pair comprising an oxidizing agent and a reducing agent, where the reducing agent is 2-hydroxy-2-sulfinatoacetic acid and/or salt thereof; homopolymers or copolymers preparable by the process according to the invention, water-in-oil emulsions which comprise at least one homopolymer or copolymer according to the invention, solid compositions which comprise at least one homopolymer or copolymer according to the invention, the use of 2-hydroxy-2-sulfinatoacetic acid and/or salt thereof as reducing agent in a process for the preparation of homopolymers or copolymers; the use of the water-in-oil emulsion comprising at least one homopolymer or copolymer according to the invention for the thickening of aqueous solutions, and the use of 2-hydroxy-2-sulfinatoacetic acid and/or salt thereof as reducing component of a redox initiator pair comprising an oxidizing agent and a reducing agent for avoiding induction times during inverse emulsion polymerization.